

REMARKS

Introduction

Claims 1-76 have been previously cancelled. Claims 77-108, 211-222, and 259-272 are currently withdrawn from consideration. Claims 109, 122, 135, 163, 179, and 195 have been amended to more clearly define the claimed invention. Claims 110-121, 123-134, 136-162, 164-178, 180-194, 196-210, and 223-258 are also currently pending in this application. No new matter has been added by the amendments to the claims. Applicant reserves the right to claim any lost subject matter in a continuation or divisional application.

Claims 109-210 and 223-258 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Shimoji U.S. Patent 5,420,458 (hereinafter "Shimoji") and Mattox et al. U.S. Patent 4,825,277 (hereinafter "Mattox").

Reconsideration and allowance of this application in light of the following remarks is hereby respectfully requested.

The Rejections Based on 35 U.S.C. § 103

The Examiner has rejected claims 109-210 and 223-258 under 35 U.S.C. § 103(a) as being unpatentable over Shimoji and Mattox. Applicant respectfully traverses.

Claims 179-194 and 247-252

As defined by applicant's amended independent claim 179, a method of making an integrated circuit includes "providing a thin substrate with a uniform thickness," (see, e.g., applicant's specification, page 4, lines 18-22 and page 5, lines 5-8). The method also includes forming on the thin substrate circuitry having a plurality of active devices, and "wherein the integrated circuit is elastic while retaining its structural integrity."

Nowhere does Shimoji or Mattox show or suggest making an integrated circuit by "providing a thin substrate with a uniform thickness," as required by applicant's amended independent claim 179. Instead, Shimoji teaches away from providing a thin substrate with a uniform thickness throughout, stating that its invention "does not allow the silicon substrate to be formed thin throughout, but partly forms the bottom recessed parts," (Shimoji, column 5, lines 23-25).

Furthermore, nowhere does Shimoji or Mattox show or suggest making an integrated circuit "wherein the integrated circuit is elastic while retaining its structural integrity," as required by applicant's amended independent claim 179. Despite the Examiner's assertion to the contrary on page 3, lines 17 and 18 of the Office Action, applicant respectfully submits that no such support is present in the specification of Mattox. Not at column 9, lines 1-13, nor anywhere else in the specification for that matter, does Mattox show or suggest that the integrated circuit is or could be elastic or make any claim regarding the structural integrity of the integrated circuit. Instead, Mattox simply teaches oxy-

nitride plugs 58 (see, e.g., FIGS. 2D and 2I), which do not form a layer over active devices but instead are used as isolation walls to fill trenches between active devices. These isolation walls do not provide for an integrated circuit that "is elastic while retaining its structural integrity," as required by applicant's independent claim 179.

Therefore, for at least the foregoing reasons, applicant respectfully submits that independent claim 179, and any claims dependent therefrom, including claim 180-194 and 247-252, are allowable over Shimoji and Mattox. Applicant respectfully requests, therefore, that the rejection of claims 179-194 and 247-252 under 35 U.S.C. § 103(a) be withdrawn.

Claims 109-121, 148-152, and 223-228

Applicant respectfully submits that amended independent claim 109, and any claims dependent therefrom, including claims 110-121, 148-152, and 223-228, are allowable over Shimoji and Mattox for at least the same reasons claim 179 is patentable over Shimoji and Mattox. Specifically, the method of claim 109 includes "forming a thin substrate with a uniform thickness," forming on the substrate circuitry including integrated circuits having active devices, "wherein the integrated circuit is substantially flexible while retaining its structural integrity." Applicant respectfully requests, therefore, that the rejection of claims 109-121, 148-152, and 223-228 under 35 U.S.C. § 103(a) be withdrawn.

Claims 122-134, 153-157, and 229-234

Applicant respectfully submits that amended independent claim 122, and any claims dependent therefrom, including claims 123-134, 153-157, and 229-234, are allowable over Shimoji and Mattox for at least the same reasons claim 179 is patentable over Shimoji and Mattox. Specifically, the method of claim 122 includes "forming a thin substrate with a uniform thickness," forming on the substrate circuitry including integrated circuits having active devices, "wherein the integrated circuit is elastic while retaining its structural integrity." Applicant respectfully requests, therefore, that the rejection of claims 122-134, 153-157, and 229-234 under 35 U.S.C. § 103(a) be withdrawn.

Claims 135-147, 158-162, and 235-240

Applicant respectfully submits that amended independent claim 135, and any claims dependent therefrom, including claims 136-147, 158-162, and 235-240, are allowable over Shimoji and Mattox for at least the same reasons claim 179 is patentable over Shimoji and Mattox. Specifically, the method of claim 135 includes "forming a thin substrate with a uniform thickness," forming on the substrate circuitry including integrated circuits having active devices, "wherein the integrated circuit is substantially flexible and elastic while retaining its structural integrity." Applicant respectfully requests, therefore, that the rejection of claims 135-147, 158-162, and 235-240 under 35 U.S.C. § 103(a) be withdrawn.

Claims 163-178 and 241-246

Applicant respectfully submits that amended independent claim 163, and any claims dependent therefrom, including claims 164-178 and 241-246, are allowable over Shimoji and Mattox for at least the same reasons claim 179 is patentable over Shimoji and Mattox. Specifically, the method of claim 163 includes "providing a thin substrate with a uniform thickness," forming on the substrate circuitry having active devices, "wherein the integrated circuit is substantially flexible while retaining its structural integrity." Applicant respectfully requests, therefore, that the rejection of claims 163-178 and 241-246 under 35 U.S.C. § 103(a) be withdrawn.

Claims 195-210, and 253-258

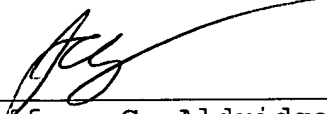
Applicant respectfully submits that amended independent claim 195, and any claims dependent therefrom, including claims 196-210 and 253-258, are allowable over Shimoji and Mattox for at least the same reasons claim 179 is patentable over Shimoji and Mattox. Specifically, the method of claim 195 includes "providing a thin substrate with a uniform thickness," forming on the substrate circuitry having active devices, "wherein the integrated circuit is substantially flexible and elastic while retaining its structural integrity." Applicant respectfully requests, therefore, that the rejection of claims 195-210 and 253-258 under 35 U.S.C. § 103(a) be withdrawn.

Application No. 10/700,429
Reply to Office Action of January 5, 2007
Amendment dated March 22, 2007

Conclusion

The foregoing demonstrates that claims 109-210 and 223-258 are allowable. This application is therefore in condition for allowance. Reconsideration and allowance are accordingly respectfully requested.

Respectfully submitted,



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